

## CLAIMS

What is claimed is:

1. 1. A method for facilitating server-initiated communications between one or more application servers and one or more application clients using HTTP protocol comprising the steps of:
  4. providing a communication server for one or more server-side applications in an HTTP based application server;
  6. wherein the communication server receives notification message data from one or more of the server-side applications, wherein the notification message data received by the communication server is intended for one or more clients of the applications, and wherein the notification message data includes application message data;
  10. providing a communication client for one or more of the clients of applications in an HTTP based application client, wherein the communication client generates polling requests to the communications server;
  13. in response to the polling requests from the communication client, sending any application message data to the communication client that is intended for any clients of applications in the HTTP based application client; and
  16. upon receiving application message data, distributing the received application message data to the clients of applications.
1. 2. The method of claim 1, wherein the communication client parses the received application message data and distributes parsed data messages to the intended clients of the applications, which may cause the clients of applications to fetch information from corresponding servers of the application.

1    3.    The method of claim 1, further comprising the step of providing a communication  
2    servlet coupled between the communication server and the communication client.

1    4.    The method of claim 1, further comprising the step of providing a message buffer  
2    for storing the data received by the communication server from the applications.

1    5.    The method of claim 4, wherein the message buffer is comprised of a hashtable.

1    6.    The method of claim 5, wherein the hashtable is a two-tier hashtable.

1    7.    The method of claim 1, wherein the clients are web-based clients.

1    8.    The method of claim 1, wherein the message data includes instructions for  
2    fetching data from corresponding servers of the applications.

1    9.    The method of claim 1, wherein the message data is used for direct  
2    consummation.

1    10.   A client/server communication framework for facilitating server-initiated  
2    communications to one or more clients using HTTP protocol comprising:  
3    a first server in an application server for providing information to one or more clients  
4    using HTTP protocol;  
5    a second server in the application server coupled to the first server for receiving a first  
6    message from the first server, wherein the first message is intended to be sent to a  
7    first client in an application client; and

8 a second client in the application client for sending an HTTP polling request to the  
9 second server, receiving the first message from the second server, and distributing  
10 the first message to the first client.

1 11. The client/server communication framework of claim 10, wherein the first server  
2 is a server for an application, the second server is a communication server, the first client  
3 is a client for the application, and the second client is a communication client.

1 12. The client/server communication framework of claim 10, further comprising a  
2 memory location for storing messages received by the second server.

1 13. The client/server communication framework of claim 12, wherein the messages  
2 are stored in a hashtable.

1 14. The client/server communication framework of claim 10, wherein the first  
2 message includes information identifying the first client and the application.

1 15. The client/server communication framework of claim 10, further comprising:  
2 a third server for providing information to one or more clients using HTTP protocol,  
3 wherein the second server is coupled to the third server for receiving a second  
4 message from the third server, wherein the second message is intended to be sent  
5 to a third client using HTTP protocol; and  
6 wherein the second message is sent to the third client in response to the same or  
7 consecutive polling requests by the second client.

1 16. The client/server communication framework of claim 10, wherein the first server  
2 is an application in a web server, and wherein the one or more clients are web-based  
3 clients.

1 17. The client/server communication framework of claim 10, wherein the first  
2 message is used to instruct the first client to fetch information from the first server using  
3 HTTP protocol.

1 18. The client/server communication framework of claim 10, wherein the first  
2 message is consumed by the first client directly.

1 19. A method for facilitating server-initiated communications from one or more  
2 servers to one or more clients under HTTP protocol comprising the step of:  
3 providing a first server for communicating with one or more clients;  
4 providing a second server for receiving a message from the first server, wherein the  
5 message includes information intended for a first client to fetch data from the first  
6 server;  
7 providing a second client in the same application client of the first client for sending  
8 HTTP polling requests to the second server; and  
9 upon receiving a polling request from the second client, sending the message from the  
10 second server to the second client; and  
11 wherein the second client distributes the message to the first client.

1 20. The method of claim 19, further comprising the step of storing the message from  
2 the first server into a buffer.

1 21. The method of claim 20, wherein the buffer is provided by a hashtable.

1 22. The method of claim 19, wherein the first server is an application under a web  
2 server, and wherein the one or more clients are web clients.

1 23. The method of claim 19, wherein the communications between the servers and  
2 clients uses HTTP protocol.

1 24. The method of claim 19, wherein the first client fetches data from the first server  
2 in response to the message.

1 25. The method of claim 19, wherein the first client consumes the message directly.

1 26. The method of claim 19, further comprising the steps of:  
2 providing a third server for communicating with one or more clients;  
3 wherein the second server also receives a second message from the third server, wherein  
4 the second message includes information intended for a third client;  
5 upon receiving a polling request from the second client, sending the information intended  
6 for the third client to the second client; and  
7 distributing the message from the second client to the third client.